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AUTHOR Putnam, Linda L.; And Others
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ABSTRACT

During the past 15 years, most studies dealing with communication and conflict in organizational settings have used a bargaining context while integrating assumptions from game theory, information processing, developmental approaches, and systems theory into their research designs. These studies also reflect four communication topic areas, including network and channel communication, control of information, perception of messages, and communication strategies. The studies all integrate conflict communication with cooperation and conflict, such that some communication patterns emerge. Communication that promotes cooperation is face to face and free of distortion, shows increased availablity and information disclosure, provides more concessions and proposals, and contains promises, recommendations, positive language, and open-ended questions. Communication that leads to competition contains inadequate conflict management practices, insufficient exchange of information, threats from low- to high-power participants, incompatible personal styles and power levels, irrelevant arguments, forcing, withholding, compromising, facial gaze, and close proximity. Since methodological and theoretical deficiencies have hindered meaningful growth in this subject area, a multidimensional approach may be warranted in future research. Such an approach would test for interaction effects among such variables as position power, message strategies, and type of conflict situation. (RL)

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Communication and Conflict in Organizations:

The State of the Art

Linda L. Putnam
Linda Birkmeyer
Tricia Jones

Purdue University

Paper presented at the annual convention of the International Communication Association, Philadelphia, May, 1979.

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DIVISION IV ABSTRACTS

The Role of Communication in Conflict and Conflict Management: The State of the Art

Linda Putnam
Linda Birkmeyer
Tricia Jones,
Purdue University

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This paper focuses on a review of literature from 1965 to the present that explains the role of communication in conflict and conflict management primarily from an organizational perspective. The paper consists of three major sections: 1) Introduction of theoretical assumptions that are made about conflict and the role of communication in conflict situations, 2) Discussion of the relevant literature, and 3) Criticism of specific and general components of the literature and suggestions for future research. The paper's major section, the discussion of the literature, consists of works that are theoretical, empirical, and applied in nature. The literature is classified into four categories: perceptions of messages and communication, control of information, channels and networks of communication, and strategies of communication in conflicts.

COMMUNICATION AND CONFLICT IN ORGANIZATIONS: THE STATE OF THE ART

Linda L. Putnam, Linda Birkmeyer
and Tricia Jones

Purdue University

Conflict, like power, is a frequently used and oft abused concept in the social sciences. This abuse stems, in part, from equating it with such terms as disagreement, hostility, competition-cooperation, controversy, tension, and incompatibility. In particular, Fink's (1968) review of the conflict literature illustrates the lack of concensus among researchers regarding the distinctions between conflict and its related concepts. While scholars recognize the futility of selecting from this mosaic a single definition of conflict, many of them acknowledge that the use of conflict in a generic sense to incorporate goals, emotions, perceptions, behaviors, strategies, and outcomes contributes to the theoretical muddle which characterizes the state of the art in the conflict literature (Thomas, 1976).

In addition to conceptual confusion, discussions of conflict are plagued with a seemingly incurable malaise of emphasizing either the constructive or the destructive effects of conflict. Thus, scholars become embroiled in an interminable controversy on the evaluative dimension of conflict. Such practice, in turn, overlooks the normalcy of conflict and underscores outcomes as the salient criterion for determining the effectiveness of a conflict. For example, research on 'win-win' versus 'win-lose' or fixed-sum versus variable sum approaches to conflict generally examines outcomes as indices of effective conflict management (Hawes and Smith, 1973).

In recent years, though, some theorists have argued that conflict is not only inevitable but also aids organizations in promoting intra-group cohesiveness and solidarity (Coser, 1956); in maintaining a balance of power between opposing forces (Blake and Mouton, 1964); in generating creative approaches to problem solving (Hall, 1971); and in identifying problems which require organizational change (Litterer, 1966). This perspective, then, treats conflict as a condition which must be managed rather than one which should be eliminated or avoided (Deutsch, 1971).

Research on conflict and conflict resolution has generated a massive array of theoretical and empirical literature which cuts across all disciplines in the social sciences. Although this literature provides insights for understanding conflict in organizational settings, the lack of integration and systematic classification of this material hinders transfer of knowledge and theoretical development. Moreover, the few sources that review and synthesize this diverse literature fail to explicate the role of communication in organizational conflict (Thomas, 1976; Pondy, 1967; Robbins, 1974).

Hence, this paper aims to classify, review, and critique the role of communication in conflict situations within organizational settings. Several guidelines govern selection of literature included in this interpretive review. First, in addition to empirical literature in the area of organizational

conflict, we include articles and books which provide conceptual discussions or applications of conflict management principles or strategies. We feel that this descriptive literature provides researchers and practitioners with heuristic direction for generating hypotheses and testing models of conflict.

Secondly, we restrict our search primarily to literature published between 1965 and 1979. Considering the breadth of the conflict material, we feel compelled to narrow the scope of our search while providing readers with current trends in the field. Thus, it seems more appropriate to limit the dates of publication than to restrict our search to specific journals or disciplines. Also, we rely on primary sources rather than choosing textbooks or other secondary sources on conflict in corporate settings.

Third, we exclude articles on conflict which fail to include communication as a direct or indirect indice of the conflict process. Communication in this sense, refers to messages, information, strategies, or means of exchanging ideas and opinions in conflict situations. In some instances, however, this role is based on our interpretation rather than on a report in the article. Moreover, we eliminate role conflict research since it seems more germane to role theory than to conflict literature.

Finally, we concur with Thomas (1976) that research in small groups, gaming, international relations, and political conflicts yields "concepts and insights of great potential relevance to the study of conflict in organizational settings" (p. 890). Thus, we incorporate into this review selected literature from other social science arenas. However, the bulk of the sources included in this essay center on conflict patterns as applied to organizational environments.

This paper is divided into three sections: 1) a review of the role of communication as depicted in theoretical perspectives and models of organizational conflict; 2) a synthesis of current descriptive, empirical, and applied literature on communication in organizational conflict. This literature is classified into four categories of communication in conflict situations--channel and network patterns, control of information, perception of messages and verbal and nonverbal strategies; and 3) a critique of the conceptual and methodological trends in this area of organizational communication research. This paper will then conclude with suggestions for future investigations.

Theoretical Perspectives of Organizational Conflict: The Role of Communication

Although organizational scholars allude to the theoretical models which undergird their notions of conflict, no investigator presents a full-scale inventory of these models. This section examines five theoretical perspectives of organizational conflict, the assumptions that underlie each, the locus or place where communication and conflict reside, and the role of communication within each model.

Much of the literature on organizational conflict follows a contextual or situational perspective whereby researchers specify the different organizational environments in which conflict occurs, e.g., labor-management negotiations, supervisory-subordinate conflict, intra and inter-departmental

conflict. Within this frame of reference, Pondy (1967) proposes three major classes of organizational conflict: bargaining, conflict between departments or interest groups in competition for scarce rewards; bureaucratic, supervisor-subordinate controversy or other conflicts along the chain-of-command which stem from attempts to control behavior; and systems, conflicts generated by coordination problems, primarily in a horizontal direction.

Although Pondy's category system is conceptually intriguing, the bulk of organizational conflict research falls into the category of bargaining (see Table 1). This phenomena leads to the repeated question of what distinguishes conflict from controversy or disagreement? Are bureaucratic and system categories classified as conflicts or as differences of opinion? Thus, scholars who present taxonomies of conflict based on environmental settings frequently focus on distinctions between contexts rather than on definitions of conflict. The purpose or type of conflict within each context supplants the issue of the nature of conflict.

Moreover, few theorists undertake the burden of proof to demonstrate that the process of conflict actually differs from one context to another. Hence, the development of a construct within this approach is relegated to the very lowest level of abstraction (Miller and Simons, 1974).

For the most part, communication within this approach does not play a salient role, unless it aids in delineating the somewhat arbitrary distinctions among conflict situations. As Miller (1978) notes in his critique of the contextual approach to interpersonal communication, ". . . the situational approach largely ignores quantitative and qualitative changes in the nature and outcomes of a communicative transaction and in the developing relationship between the communicators" (p. 166).

The second most prevalent perspective for researchers who study organizational conflict is game theory and its psychological counterparts--social exchange and stimulus-response. Game theory, as Rapoport (1965) explains, aims to discover logical structures inherent in a variety of conflicts and to describe these structures in mathematical terms. Basically, game theorists operate from assumptions of 1) rationality--knowledge of goals, strategic alternatives, possible outcomes of choices, and utilities or values associated with each outcome; 2) hedonism--the belief that competitors are motivated to maximize gains and to minimize losses; and 3) intentionality--the belief that the resolution of conflict is a strategic, intentional process (Steinfatt and Miller, 1974; Gergen, 1969). The locus of conflict for game theory models is competition based upon rationality and utility of outcomes.

A similar perspective and one which forms the foundation for the classical Prisoner's Dilemma game is Thibaut and Kelly's social exchange theory. This approach treats conflict as an implicit or explicit exchange of rewards and costs. The critical variables in determining the outcome of a conflict are the negotiator's comparison levels, i.e., attractiveness of rewards, and the degree to which each participant has fate or behavioral control over the other (Gergen, 1969).

Research which employs zero-sum, non-zero sum, or mixed-motive variations of the Prisoner's Dilemma game incorporate assumptions which underlie game

theory and social exchange models. Moreover, other organizational theorists expand on game theory assumptions to postulate unilaterial, mixed, and bilateral power systems in organizational conflicts (Bonoma, 1976), models of information exchange associated with goal-seeking activities (Longini, 1971), and incentive structures which influence conflict behavior (Thomas, 1976).

In game-theoretic models, communication is the vehicle for information exchange about costs, utilities, and choices, but more importantly, it performs strategically to persuade one's opponent through intimidation, bribery, behavior modification, and environmental management (Bonoma, 1976). Thus, communication performs a manipulative function within this perspective. However, a number of researchers who examine conflict from this viewpoint control for communication by restricting mode or access to messages rather than testing for effects of persuasive strategies.

Even though a majority of bargaining and negotiation studies operate from this perspective, researchers seem dissatisfied with game-theoretic treatments of conflict and communication (Miller and Simons, 1974). Specifically, game theorists, while developing rigorous mathematical models, fail to account for the degree of risk or uncertainty prevalent in conflict situations; fail to incorporate decision modes based on incomplete information and nonrational motives; fail to account for modifications in outcomes and utilities which evolve during the interaction; and fail to incorporate trust levels, relationship factors, and other inputs into the negotiation process (Hawes and Smith, 1973). In effect, game-theoretic models seem inappropriate for examining communication in conflict situations.

The third theoretical perspective, information processing, treats conflict as a stimulus-response phenomena surrounded by such concepts as intentionality, perception, and value-laden effects. In this perspective, communication may cause conflict through stoppages and breakdowns or ironically, may serve as a medium for resolving conflicts, i.e., the notion that increased communication may lead to reduced hostility (Ruben, 1978; Hawes and Smith, 1973).

Even when research in this area focuses on semantic difficulties, noise or listener distortion, repression or ambiguity of information, information processing models generally present a linear, cause-effect representation of both conflict and communication (Ruben, 1976; Robbins, 1974; Jandt, 1973; and Hilijard, 1973). Yet, the participants' perception of conflict and their interpretations of symbols and messages affect the outcome of conflict situations (Ruben, 1976; Hammond, 1965). Hence, Hilijard (1973) contends that an information processing model should account for realistic differences between backgrounds of negotiators, for patterned changes in perceptions of items of information, and for modifications of values assigned to costs and gains. Thus, a useful message-processing model treats conflict as a dynamic, adaptive, and cumulative event.

Another factor which characterizes the cause-effect models of conflict is the evaluative dimension, e.g., are conflicts destructive or constructive? What determines the functional or dysfunctional nature of conflict? The more traditional approaches treat conflict as a malfunction in the system or a problem which must be resolved to retain "psychological health of organizational participants and efficiency of organizational performance" (Pondy, 1967, p. 307).

In contrast, those who view conflict as potentially constructive or destructive frequently base this determination on participants' satisfaction with outcomes or their perceptions of the balance derived from costs expended and gains received (Deutch, 1969; Pondy, 1967). Both perspectives place the value of conflict on the participant effects rather than on the contributions of conflict to a larger system. In this sense, conflict is functional or dysfunctional to the extent that it facilitates or inhibits an organizations adaptation to the environment, its productivity, or its sense of stability or cohesiveness (Ruben, 1976; Pondy, 1967).

The forth perspective, the developmental approach, views conflict as a series of interconnected stages which gradually evolve into a conflict aftermath. For Pondy (1967) and Angell (1965), this episodic process is intertwined with the relationship among participants.

Pondy's typology of conflict stages, e.g., latent, perceived, felt, and manifest conflict, and Thomas' (1976) process model, e.g., issues and frustrations, alternatives, behavior, strategy and tactics, outcomes, and aftermath, represent developmental approaches to organizational conflict. Communication within this perspective resides in the behaviors or the strategies and tactics of interaction.

Systems theory, or the fifth perspective, conceives of conflict as a dynamic, constant condition on an organization--the sine qua non of growth and change within a physical and social environment. In open systems models, communication is continual and inevitable, thus conflict is not a result of insufficient information, breakdowns in communication, or message error (Ruben, 1976). Instead, it is a means for processing inputs and outputs to maintain homeostasis or stability while adapting to messages from within and outside organizational boundaries. Moreover, within the systems approach, increased communication is not necessarily a sufficient condition for conflict resolution. That is, the amount and frequency of communication are mediated by the patterns, timing, and trust relationship of participants. Thus, since both communication and conflict are processes, their interrelationship in the system is complex and indirect (Hawes and Smith, 1973).

Systems and developmental approaches to organizational conflict are adopted primarily by theorists and critics of research. Although some investigators employ these two perspectives, the bulk of the empirical literature adheres to contextual, game theory, and information processing notions of conflict and communication.

Synthesis of Current Literature on Communication and Organizational Conflict

Although these five perspectives provide a framework for examining the role of communication in organizational conflict, some studies in this area cluster into one theoretical arena while others combine assumptions from different perspectives. Thus, an investigator might blend cause-effect notions of information processing with game theory assumptions of hedonism. Since this overlap exists, this section is organized into four categories of communication: channel and network patterns, control of information, perception of messages, and communication strategies. Within each category we discuss

theoretical assumptions, relevant research findings, and criticisms of this approach to conflict research.

Networks and Channels of Communication

In the literature that focuses on networks and channels, communication is the process of transmitting a message via a channel. Consistent with the information processing perspective, this approach emphasizes effects, success of transmission, information overload, breakdowns, and flow of messages. From the situational perspective, empirical research focuses on the bargaining context while the conceptual and applied literature covers bureaucratic conflict. This review of studies on network and channels in organizational conflict covers mode of communication, e.g., written, oral, audio-visual; choice of channels, blockages within channels; directions and flow of messages; and scope of networks.

Investigators often treat mode of communication as a controlled variable rather than one manipulated or tested by the experimenter. Hence, written or face-to-face interaction is regulated by the research design (Lieberman, 1975). Some studies, however, examine the effects of a particular mode of communication on strategies and outcomes of the negotiation. Johnson's (1974) review of such research compares three types of modes: choice of game behavior, written messages, and nonverbal cues. The combined use of all three channels induces more cooperation than does paired use of only two modes. When the only available mode of communication is a subject's game behavior, players make abrupt changes in strategies to induce more cooperation from their opponents. In contrast, Turnbull, Strickland and Shaver (1974) observe that the mode of communication does not significantly affect outcomes in a bargaining situation; however, the most cooperative outcomes stem from the face-to-face condition, followed by the audio-visual treatment and then auditory only condition. In a comparison between face-to-face interaction and audio only, the audio condition evokes more task-oriented communication and more items of information. This finding, as Stephenson, Ayrling and Sutler (1976) point out, may evolve from three effects of face-to-face interaction in a negotiation: 1) encouraging spontaneous communication, 2) contributing to discussion on more diverse topics, and 3) promoting adoption of conventional role relationships. Thus, face-to-face communication, through its spontaneous, free-flowing nature, may inhibit information giving and reduce task-oriented interaction.

Investigators also examine the role of verbal and nonverbal modes of communication in bargaining situations. Congruency of verbal and nonverbal communication, as observed in Johnson, McCarthy, and Allen's (1976) investigation, has no significant effect on negotiation outcomes, but access to, as well as type of, nonverbal messages affects the strategies a participant employs (Lewis and Fry, 1977). Using ninety-two male graduate students in a buyer-versus-seller bargaining game, these researchers manipulate visual communication opportunity and bargaining orientations and measure verbal content, facial gage, head closeness, and floor closeness of participants.

In successful dyads, subjects' verbal cues are characterized by more concessions, more proposals, longer review of proposals and more cooperative strategies than are verbal messages in unsuccessful teams. The verbal and

nonverbal behaviors in unsuccessful dyads serve a competitive function, especially for individualistically-oriented subjects who use threats, irrelevant arguments, facial gaze and close proximity as defensive strategies. But for subjects with problem-solving orientations, facial gaze, head closeness and close proximity produce positive results. Thus, the nature of the relationship determines, to some extent, the impact of nonverbal cues on the negotiation process.

In sum, the composite use of verbal, written, and nonverbal modes of communication tend to promote cooperative outcomes, but face-to-face interaction in 'win-win' orientations inhibits information-giving and promotes competitive responses to verbal and nonverbal behaviors.

In addition to modes of communication, researchers also examine channel selection and breakdowns or barriers within these channels. In conflicts of coordination between units of an organization, controversy exists as to whether use of alternate rather than routine formal channels would increase or decrease conflict. Robbins (1974) contends that this redistribution of knowledge and information resources through alternate channels creates opposition between units while Likert and Likert (1976) argue such channels help participants develop innovative solutions, detect breakdowns in the primary channels, and reduce conflict overload. Moreover, increased use of upward, downward, and horizontal communication during a conflict situation facilitates low or manageable levels of conflict.

Selection of channels for conflict management seems intertwined with the noise or amount of blockage in the system. Noise, in this sense, signals distortion or listener ineffectiveness which impinges on the fidelity of information exchange (Robbins, 1974). Thus, theorists often postulate the belief that communication channels which are free of distortions or blockage provide a medium for candid discussions and thereby lead to constructive conflict management (Assail, 1969; Pelletier, 1969). In the area of communication channels, research findings are contradictory in terms of using alternate channels to manage departmental conflicts. Such factors seem mediated by variables such as noise in the channel, trust-level of negotiators, personality traits of participants, and roles of senders and receivers.

Theorists also argue that two-way or bilateral flow of messages, as opposed to one-way or unilateral flow, facilitates conflict resolution (Lindskold, Tedeschi, Bonoma, and Schlenker, 1971). Moreover, Bonoma (1975) observes that the emphasis of messages changes in unilateral, bilateral, and mixed communication conditions. In uni-lateral systems, the source sends messages to the target intended to change the target's behavior. Mixed systems involve a two-way exchange of messages between two parties who alternate as source and target. In bilateral systems, the relationship becomes a third party of equal importance to the participants, and messages are concerned with joint policy formation. Bonoma concludes that context affects the degree of trust and cooperation in conflict situations.

A final topic which falls into the category of communication channels is the extent or scope of the individuals involved in a communication network. Conflict, in this sense, operates from a system or total organization context. North, Koch, Zimmes (1960) contend that the intensity and type of organizational

conflict hinges upon the role relationship of participants, the degree one internalizes a conflict, and the scope or extensiveness of individuals included in one's contact system.

Research in the area of conflicts and networks has not led to fruitful ventures or significant findings. Investigations of communication modes, which utilize laboratory bargaining experiments in artificial designs, manipulates verbal, written, or other modes rather than examines the nature or type of message system within each. The Lewis and Fry (1977) study is an exception to this trend. The decision to use mode as an independent measure restricts the design to questionable value.

Basically, there is a paucity of research on channel selection, channel usage and network patterns. Researchers should focus more on interdepartmental and system-wide conflicts to examine the role of upward, downward, and horizontal flow in the various stages of conflict management.

Control of Information

Literature in this category focuses on amount, accuracy and effects of information in organizational conflict. Assumptions of game theory and information processing underlie the majority of research included in this category; hence studies emphasize quasi-causality, clarity or accuracy between sender and receiver, effects of information transition, and rationality-intentionality of the conflict process.

Three approaches to the control of information emerge in the empirical literature: 1) the amount of communication available; 2) accuracy of information--clarity, honesty, ambiguity, and 3) effects of payoff information on the bargaining process. In the first approach, studies on the bargaining process focus primarily on the amount of communication allowed or available. Bennett (1971) defines effective communication as the knowledge of all previous moves, or "perfect information" with imperfect information resulting in ineffective communication. The strategy of participants is to obtain maximum available information for information controls behavior. Therefore, the more information that is obtained, the more effective is communication and the more one can control behavior.

To test this notion of maximum information, Swingle and Sante (1972) use three communication conditions, forced, optional and no communication, in three different bargaining games. They report that increasing the availability of communication increases cooperation in all three bargaining situations. Likewise, Greenwood (1974) notes that increased amounts of information results in more successful bargaining and greatly enhances cooperative bargaining efforts. Similarly, Narwell and Schmidt (1975) also focus on both the amount and effects of information, concluding that increasing communication increases cooperation, even after non-cooperative behavior has begun.

Yet, these effects may be mediated by personalities of negotiators and their predominant roles as sender and receiver. Shure, Meeker, and Hansford (1965) examine the effect of information availability on dominance tendencies of bargainers. Results suggest that communication access influences some bargainers to become less dominant, but also reinforce dominance tendencies for some bargainers.

Cross (1977), while still focusing on the negotiation context, discusses only effects of information, not the amount. Information from both internal and external sources is one determinant of responses to actions. The participants also learn their roles and what to expect from others through transmission of information. Hence, in a game or negotiating context, as information increases, so does knowledge of previous moves, ability to control behavior, "effectiveness" of communication, and cooperative behavior. Information also serves as one determinant of behavior and as a vehicle for learning roles (Bennett, 1971; Cross, 1977; Marwell and Schmidt, 1975).

The second approach to the control of information includes those authors discussing conflict in the organizational setting and focuses on accuracy and ambiguity of information rather than on amount. According to Robbins (1974), insufficient exchange of information, ambiguous information and complete information can cause conflict. Perfect knowledge of other organizational units reveals inequities which may lead to conflict, while imperfect knowledge makes coordination easier. If imperfect knowledge is ambiguous or insufficient, it too can cause conflict.

Moreover, conflict can be stimulated by the repression of information, either partially or completely, or by transmission of either too much information or threatening ambiguous information, thus creating opposition between organizational units. The control of information can resolve conflict if the conflict is a result of inadequate communication (Robbins, 1974). The release of information then, should reduce the intensity of stimulated conflict. But management must also remove the perception of threat as well. Likert and Likert (1976) discuss the control characteristics of information sharing in a "system 4" organization which leads to fewer and more easily resolved conflicts. In these organizations, supervisors and subordinates willingly share all relevant information accurately. Thus, accurate and complete information leads to low levels of manageable conflict. However, when the amount and accuracy of information drops below optimal levels, conflicts may occur.

The third approach to control of information centers on the effect of payoff information on bargaining processes and outcomes. Lamm (1976a, 1976b) utilizes European high school students to test the effect of symmetric and asymmetric payoff information and costliness of bidding on bargaining outcomes. He reports contradictory results. In his first study (1976a), Lamm observes that bargainers with more information are exploitive and manipulative; yet, in his second study (1976b) he discovers the opposite effect. In the latter case bargainers with complete information make smaller initial bids, make smaller concessions, and distribute profit more equally than uninformed bargainers. Davis (1975) studies payoff information and tolerance of ambiguity in bargaining situations. He concludes that information and tolerance of ambiguity affect payoff differences, negotiation time, and post-negotiation attitudes. Swensson (1967) manipulates communication and information of payoffs in a bargaining game. This study supports previous findings (Lamm, 1976a) that informed bargainers, as opposed to uninformed bargainers, were exploitive and highly competitive.

Some studies have included information but have treated it tangentially. Pilisuk and Skolnick (1968) combine prior announcement of intentions with conciliatory strategies in a Prisoner's Dilemma game. They report that the

effect of strategies is more important than the effect of prior announcement of intentions, although the latter information does increase cooperativeness of the bargainers. Stern, Sternthal, and Craig (1973) manipulate high and low conflict groups by controlling payoffs, previous performance, and information about performance of other groups. The specific effect of information is not reported.

While the applied literature focusing on the control of information has no strong direction, the majority of the authors concentrate on the bargaining context, and prescribe appropriate amount, accuracy, and types of information. One common prescription is that negotiators should seek complete and accurate information and establish an adequate communication flow (Dempsey, 1974). Symmetric or asymmetric distribution of information is also an important consideration in simulating negotiations for training (Sachman, 1975). The types of information to be disclosed for collective bargaining include organizational activities, financial data, plans, and manpower needs, and should be agreed upon by management and unions (Scoullar, 1972).

Other authors who focus on information control discuss its strategic implications in the larger organizational setting as well as in the negotiation context. The sharing of information between different sub-systems is a strategy for gaining support for one's position, as well as a tool for active management of conflict. The National School Public Relations Association (1976) contends that the party that effectively conveys its message to the community is likely to prevail in a strike. Thus, information sharing to external sources strengthens one's position. Information sharing can also aid in the management of conflict and in reuniting parties after a conflict (NSPRA, 1967; Henderson, 1971). Morano (1976) adds that conflict management is facilitated by all parties having access to the same information, disclosing relevant arguments, and soliciting feedback. Thus, control of information as depicted in the applied and the empirical literature functions as a strategy for verbal battle as well as a tool for reaching a negotiated settlement.

Criticism of the literature on control of information centers on conceptualization of conflict and communication, selection of research variables, and implementation of design features. Within the game theory model, conflict is narrowly defined as competition and communication as control of information. Researchers in this arena operate from the assumption that participants can access 'perfect knowledge' of the opponent's moves, of pertinent facts, and of values linked to outcomes. This assumption stems from game theoretic principles of rationality and intentionality. But in actual negotiations, it is doubtful that this 'perfect information' beast exists. Thus, the manipulation of completely verifiable information is of questionable value and limited applicability. Moreover, the process of acquiring information may override the effects of actually controlling it. Hence, investigators should treat communication as a dependent as well as an independent measure. In sum, game-theoretic models employed in this line of research restrict the role of communication and the complexity of information exchange in bargaining situations.

In the research per se, only a few studies control for other variables which may alter effects of information control. Such variables include skills and personality traits of the bargainers, symmetry of information distribution, reliability of information, to list but a few. Since the focus on

outcomes is so prevalent in this literature, we know only a modicum about the effects of information control on the interaction patterns of negotiators.

Perception of Messages

Literature in this category focuses on perceptions of information and on effects of personal attributes on conflict strategies. Researchers who concentrate on perceptions of messages emphasize the values, attitudes, and experiences of participants and the processes of interpreting communication stimuli. A key assumption is that attitudes and perceptions influence behavior. Authors in this area define conflict both objectively, as incompatable activities and subjectively, as the perception of these activities. Studies which fall into this category do not consistently adhere to only one or two theoretical models. However, an emphasis on perceiving and interpreting messages is one aspect of the broad range of information processing.

The role of perceptions in conflict serves three distinct functions in the organizational literature: 1) perceptions serve to define the conflict situation and are equally as important as reality (Deutsch, 1969; Rosenburg and Stern, 1970). In effect, the definition of a conflict situation hinges upon participants' perceptions of it, in addition to conflict patterns within the organizational environment. 2) perceptions are a source of conflict. According to Longini (1971) an individual's perceptions of the information environment, along with values, determines his behavior choices. Because the process of perception is selective, or differs between individuals, subjective interpretation of information may lead to conflict behavior (Rosenburg and Stern, 1970). Deutsch (1969) adds that misperceptions and biased perceptions may also serve as a source of conflict or conflict escalation. 3) perceptions are a potential resource for effective conflict management (Stagner, 1965). Since perceptions are one of the alterable components of conflict, resolution can occur by exposing and reducing misperceptions, checking perception processes and by promoting perception from the point of view of others (Burton, 1968; Stagner, 1965; Deutsch, 1969). Thus perceptions of the information environment serve as definitions of conflict situations, as potential sources of conflict, and as resources for managing conflicts.

Research on perceptions of messages centers upon the effects of participation on perceived intensity of conflict or upon the effects of psychological motivations on communication content. In the first area investigators concur that increased participation in conflict management contributes to a reduction in the amount of perceived conflict between groups.

Hill (1975) observes in his field study of Illinois teachers that the more the management system and the teachers actively participate, the lower the level of perceived conflict between the groups. Similarly, Brehmer (1971) measures the effect of feedback and communication on policy similarity and consistency of cognitive conflict. Using trained subjects, Brehmer concludes that communication leads to a lower level of conflict and results in increasing policy similarity. On the other hand, Myers and Bach (1976) note that intragroup communication among uncooperative bargainers in a Prisoner's Dilemma game leads to distorted perceptions of the favorability of that group's position. Saine (1974) hypothesizes that perceptions of conflict are based on knowledge about persons involved in the conflict; and therefore a person's

information load should affect his or her ability to perceive and judge conflict. His results suggest that as a person's information load increases to optimum levels so does his or her ability to perceive conflict. Furthermore, Saine contends that information deprivation is far worse than excess information. In summary, Saine concludes that a person's ability to detect conflict and his or her ability to assess its magnitude may be two different processes.

In the second area, several studies suggest that psychological attributes affect communication strategies in conflict. Spector (1977) employs the Stern Self-Description Questionnaire with student negotiators to test the impact of different psychological motivators on the use of bargaining strategies. Bargainers with high social approval needs share payoffs, those with altruistic needs transfer payoffs, those who are eager to play are bluffed by their opponent, and those who mirror the behavior of their opponent use coercion and threats. Spector concludes that bargainers with similar personalities are more cooperative and that personality and perceptions of negotiators have a greater influence on outcomes than does the type of persuasive strategies used. In the applied literature, Cohen, Kelman, Miller, and Smith (1977) employ Burton's (1968) concept in a conflict workshop on the use of perceptions in conflict management. They attempt to develop a vocabulary for conflict de-escalation and for reduction of tension.

The paucity of literature on perceptions of messages and communication precludes formulation of any general conclusions from this research. Although there is strong need to continue research on the role of perceptions in conflict processes, the literature included in this review evinces some problems. For the most part, studies do not utilize consistent measures of perceptions, and focus on functions rather than on other aspects of perception. Specifically, the formation of perceptions should receive more attention as well as the communicative behaviors that contribute to this formation process. Moreover, there is a dire need for field research in this area.

Communication Strategies: Verbal Messages and Tactics

The literature in this category examines communication as a set of strategies and tactics employed by the participants. Both descriptive and empirical articles concentrate on developing typologies of verbal strategies which characterize cooperative and competitive behaviors. Since this research has a clear behavioral definition of communication, it is theoretically more congruent with the developmental or the systems perspectives, however, a majority of studies continue to follow game theoretic assumptions. But some research on message strategies examines conflict within interpersonal and intergroup sub-units. This review clusters into conflict styles, power and influence strategies, and links between verbal messages and cooperation/competition.

The area of conflict style encompasses research which focuses on modes of conflict resolution behavior and are primarily characteristic of interpersonal conflict behavior. Roloff (1976) presents a typology of pro-social and anti-social conflict styles. The pro-social modes, which facilitate relational growth, include such conflict techniques as rewards and punishment, expertise, and commitment while anti-social modes cover revenge, regression, and verbal or physical aggression. Using Blake and Mouton's (1964) modes of conflict, Burke (1970) examines the effects of conflict style on supervisor-subordinate

conflicts in an organizational setting. He reports the effect of modes of conflict management on perceptions of constructively handled conflict and subordinate satisfaction. Results from 74 managers in the engineering department of a large corporation reveal that conflict techniques are rank ordered for effectiveness in the following manner: 1) confrontation, 2) smoothing, 3) forcing, 4) compromise, 5) withdrawal. However, subordinates feel that superiors who constructively deal with conflict used confrontation and smoothing while less constructive supervisors employ withdrawal and forcing. Superiors who are perceived as rejecting or discouraging subordinate disagreement are viewed less favorably than those who did not discourage it. These conflict modes also apply to intergroup conflict. Bonacick (1972) reports that groups with high solidarity have more intergroup communication and engage in more normative strategies, like use of evaluative words, than do groups with low solidarity. This finding contradicts assumptions that high intragroup solidarity promotes isolation. Lanigan (1970) contends that isolation because it emphasizes 'ego-centric' speech and confrontation because it develops group identity contribute to polarization between groups. Smyth (1970) reviews research on intergroup conflict resolution, particularly that which applies Blake and Mouton's (1964) five strategies. He posits that the use of forcing, withdrawal, accommodation and compromise aim to maintain harmony in the organization at all costs and frequently sacrifice constructive conflict techniques, e.g., problem-solving.

The second cluster of research on conflict strategies views influence or power as the determinant of verbal tactics, Donnelly (1971) suggests that the power motives which characterize a bargaining relationship dictate the appropriateness of such strategies as coercion, collusion, pressure, and accomodation. Moreover, the bargaining skill of a negotiator, which includes discursive and persuasive abilities, imaginative offers, effective timing, and anticipation of the opponent's behaviors, contributes to successful influence attempts in negotiations. Tjosvold (1973) examines the effects of power and negative strategies on the perceived characteristics of bargainers. He reports that threats issued by low power individuals affront the dignity of a high power person which results in low compliance and negative characteristics ascribed to the low power participant.

Donahue (1978) contends that increasing style and power incompatabilities results in more reliance on communication and more dysfunctional conflict in a group bargaining situation. Although amount of communication is not specifically measured, his hypothesis is supported. His study also reveals that successful negotiators employ more reward-reducing strategies than do unsuccessful negotiators. In these three studies, power motives, power position, and power incompatibilities affect verbal tactics, reaction to threats, and amount of communication in a bargaining situation.

In addition to conflict styles and power variables, verbal strategies are linked with cooperative and competitive motives. Angelmar and Stern (1978) present an eight category system of cooperative and competitive communication for use in research on bargaining. The eight categories which emerged as reliable and valid are promises and threats, positive and negative normative appeals, warnings and recommendations, rewards and punishments, commitments, self-disclosures, questions and commands. Bonoma (1972) and Bonoma and Tedeschi (1974) test the effect of threat on cooperative and competitive

outcomes. In an experiment which utilizes the Prisoner's Dilemma game, they observe that threat and punishment elicit compliance from opponents. In a similar study by Bonoma, Tedeschi, and Helm (1974), subjects give more promises when their opponents are cooperative as opposed to when they are competitive. But Summers (1968), who instructs subjects to use either a persuasive or a cooperative strategy, reports that compromise behavior for one participant is not linked to his or her opponent's compromise behavior. Instead, he finds that similarity of belief systems and change in cognitive conflict task affect compromise decisions.

Cooperative behaviors are also linked to success in reaching an acceptable settlement and to preference for bargaining strategies. Lewis and Fry (1971), cited in a previous section of this paper, conclude that successful bargaining dyads avoid irrelevant arguments, personal rejection of opponents and threatening behavior, while unsuccessful dyads employ these strategies. Deutsch (1966) employs subjects trained in the use of cooperative strategies and compared their bargaining outcomes with those of untrained bargainers. He notes that trained subjects have significantly better payoffs than untrained bargainers; furthermore, this cooperativeness was sustained over a number of trials. Cheney, Harford and Soloman (1972) manipulated four strategic conditions: a) positive options, b) negative options, c) both, and d) neither as well as two contingency conditions. They report that subjects prefer positive rather than negative strategies in the contingent rather than the non-contingent condition. In sum, research on the effects of threats and promises reveals that threats induce compliance from opponents while promises stem from the opponent's cooperative behavior. Moreover, subjects prefer cooperative bargaining strategies and are more successful in reaching a settlement when they avoid competitive tactics.

The applied literature on verbal strategies, as opposed to reports of empirical research, prescribes communication strategies to reduce conflict intensity. Using transactional analysis, Acuff and Velleri (1976) describe games that bargainers play. To counteract these distributive tactics, the authors recommend that bargainers be open, give unexpected responses, and provide "positive strokes" for their opponents. Taking a slightly different approach, Wingo (1970) suggested that management keep track of important documents, haggle well, and act tough, when bargaining with labor. Wall (1975), an author that has contributed much to bargaining literature, suggests that managers eliminate expressions of distrust from the bargaining arena. Recommendations for superior-subordinate communication strategies resemble those supplied for bargainers. Grossman (1970) advocates that interactants clarify ambiguities, honestly voice disapprovals, and assure congruence of verbal and nonverbal messages. Thus, the applied as well as the empirical literature favors cooperative over competitive communication strategies.

Although research on message strategies focuses directly on the communication of participants, the findings of this research are limited by some conceptual and methodological problems. One difficulty stems from casting message strategies into a dichotomous mold of positive versus negative or threats versus promises. Thus, value judgments of goodness and badness and bi-polar categorization are implicit in the focus on message strategies. Moreover, investigators frequently predetermine messages as independent measures and control for spontaneous dialogue effects. Hence, messages are

isolated from the larger system of interaction and from behaviors which do not fit into these bi-polar strategies. Also, the operational definitions of these verbal tactics are inconsistent from one study to the next. Though researchers may concur as to the conceptual meaning of a threat, they may pose very different definitions of it within the design of their research. Finally, investigators should devote less attention to outcomes and more concern with understanding how channel, perceptions, and context of relationship impinge on message strategies.

Conclusions and Recommendations: A Critique of Trends in Communication and Organizational Conflict Research

This synthesis and interpretative review of the organizational conflict literature concentrated on studies which, incorporated, either explicitly or implicitly, communication-related variables. Even though we excluded articles which did not conform with this specification, we felt that we included a representative sampling of the organizational conflict research. For a comprehensive review and critique of the organizational conflict and negotiation-bargaining literature, see Thomas (1976), Ruben and Brown (1975), Litterer (1966), and Robbins (1974). This paper discussed five theoretical perspectives for organizational conflict research. The majority of conflict studies included in this review adopted a bargaining context with game theory assumptions of rationality and intentionality, with linear, cause-effect models of both conflict and communication and with the dichotomous dimension of functional/dysfunction or cooperative/competitive integrated into these research designs. Very few studies examined conflict from an episodic perspective or from its role within an organizational system. This paper presented a review of the literature classified into four communication topic areas: network and channel communication, e.g., modes, stoppages and breakdowns, flow of messages, and scope of networks; control of information, e.g., amount and accuracy of information and effects of payoff information; perception of messages, e.g., interpretation of communication stimuli and personal attributes of negotiators; and communication strategies, e.g., conflict styles, power and influence tactics, and verbal messages of cooperation/competition.

For the most part, these four communication areas and variables that fall within each are studied in isolation of one another. However, each one integrates communication with cooperation and competition. Specifically, communication patterns which promote cooperative approaches to conflict are: face-to-face, visual, and audio modes of communication; channels free of distortion and blockage; increased availability of communication; increased information disclosure, but in small increments; more concessions and proposals; use of confrontation and smoothing conflict styles; and use of reward-reducing strategies such as promises, recommendations, positive language, and open-ended questions. In contrast, the communication patterns that lead to competition are: insufficient exchange and repression of information; threats from low to high power participants; lack of active participation in conflict-management practices; incompatibilities in interpersonal styles and power levels; and use of such strategies as threats, irrelevant arguments, forcing, withholding, compromising, facial gaze, and close proximity.

Although this summary presents a broad overview of research conclusions and hence is admittedly incomplete, this mosaic of findings depicts a rather barren and colorless scene for the state of the art in communication and organizational conflict. It seems that methodological and theoretical deficiencies contribute to this sterility and hinder development of more fertile avenues for research. In particular, investigators seem trapped within the bargaining paradigm of conflict research. Since this model presumes adversary relationships between opponents and dichotomous treatment of cooperation and competition, it fosters experiments based on self-evident questions and on orientations toward outcomes rather than process. Moreover, this model has generated a plethora of laboratory studies and only a small number of field investigations; hence, we know only a modicum about supervisory-subordinate conflict, interdepartmental conflicts, and work group controversies. Such research calls for the development of survey instruments and quasi-experimental studies which can be conducted in the field. In addition, natural history, nonparticipant observation, ethnographic studies and other qualitative investigations could be used to generate research questions, isolate salient variables, and examine conflict episodes. Whether in the field or in the laboratory, future research should adopt a multi-dimensional approach to communication and conflict, one which tests for interaction effects among such variables as position power, message strategies, and type of conflict situation.

But theoretical as well as methodological changes seem necessary to redirect the course of communication and conflict research. If conflict in organizations, as Pondy (1967) and Thomas (1976) contend, is a series of recurring episodes, then future research should attempt to ascertain the characteristics and stages of these episodes and the contingencies which give rise to their recurrence. Communication patterns may be critical factors in distinguishing between the stages and in categorizing the types of organizational conflict. Such a perspective calls for longitudinal investigations and a variety of field methods, but the developmental perspective could lead conflict researchers out of the quagmire of game theory assumptions and competition-cooperation dilemmas.

Furthermore, the systems perspective offers promise for fruitful research of interaction analysis and of the interface between subsystems, the organization, and its environment. Verbal interaction within the systems model, whether in a bargaining or problem solving situation, consists of behavioral sequences which form redundant patterns during the interaction of participants (Fisher, 1978). These patterns, in turn, aid predictability of future behavior. Investigators could collect samples of argument patterns and analyze these in conjunction with goals, concessions, and perceptions of the conflict process. In a broader view of the systems perspective, researchers could compare perceptions and responses to communication about conflict incidents within and between subunits of the company. From a socialization perspective, researchers could examine how communication facilitates the development of organizational norms for conflict management? Do organizations handle conflict in a similar or dissimilar manner from problem solving communication? What is the role of politicing, lobbying, and personal contact systems in conflict situations? How do factions form and perpetuate conflict through communication patterns?

Although the research on communication and organizational conflict is in a state of infancy, it has amassed a sizeable following of researchers who believe that communication influences the outcomes of a conflict. An expansion of the current theoretical framework and methodological directions to include more research on perceived conflict, interactional analysis, and evolution of conflict episodes provides promise for understanding the way communication defines and influences conflict processes in organizations.

TABLE 1

Summary of Organizational Conflict Studies:

Communication Focus and Methodological Considerations

Researchers	Communication Focus	Research Setting	Classification of Organizational Conflict	Variable	Data Collection Method
Brehomer, B. (1971)	Perceptions of messages and communication	laboratory	systems	independent	outcome measures
Burke, R. (1970)	Perceptions of messages and communication	field	bureaucratic	independent (or interviewing)	self-report, survey
Hill, C. (1975)	Perceptions of messages and communication	field	bargaining	intervening	self-report
Myers, D. & Bach, P. (1976)	Perceptions of messages and communication	laboratory	bargaining	intervening	self-report
Saine, T. (1974)	Perceptions of messages and communication	laboratory	general	independent	outcome
Spector, B. (1977)	Perceptions of messages and communication	laboratory	bargaining	dependent	self-report and outcome
Davis, L. (1975)	Control of Information	laboratory	bargaining	independent	outcome
Lamm, H. (1976)	Control of Information	laboratory	bargaining	independent	outcome
Lamm, H. (1976b)	Control of Information	laboratory	bargaining	independent	outcome

Researchers	Communication Focus	Research Setting	Classification of Organizational Conflict	Variable	Data Collection Method
Pilisuk, M. & Skolnick, P. (1968)	Control of Information	laboratory	bargaining	independent	outcome
Spector, B. (1976)	Control of Information	laboratory	bargaining	dependent	outcome
Stein, L. (1973)	Control of Information	laboratory	bargaining	independent	outcome
Swensson, R. (1967)	Control of Information	laboratory	bargaining	independent	outcome
Cole, S. G. (1972)	Channels and Networks	laboratory	bargaining	independent	outcome
Greenwood, J. (1974)	Channels and Networks	laboratory	bargaining	independent	outcome
Johnson, D., McCarty & Allen (1976)	Channels and Networks	laboratory	bargaining	independent	outcome
Leiberman, B. (1975)	Channels and Networks	laboratory	bargaining	intervening	outcome
Lindskold, S., Tedeschi, J., Gonoma, T. & Schlenker, B. (1971)	Channels and Networks	laboratory	bargaining	intervening	outcome
Leusch, R. (1976)	Channels and Networks	laboratory	bureaucratic	intervening	outcome
Lewis, S. & Frey, W. (1977)	Channels and Networks	laboratory	bargaining	independent and dependent	outcome

Researchers	Communication Focus	Research Setting	Classification of Organizational Conflict	Variable	Data Collection Method
Shure, Meeker, & Hansford (1965)	Channels and Networks	laboratory	bargaining	independent	outcomes and self-report
Stephenson, G. (1976)	Channels and Networks	laboratory	bureaucratic	independent	outcome
Swensson, R. (1967)	Channels and Networks	laboratory	bargaining	independent	outcome
Swingle, D. & Sante, A. (1972)	Channels and Networks	laboratory	bargaining	independent	outcome
Turnbull, Strickland & Shaver	Channels and Networks	laboratory	bargaining	independent	outcome
Bonacick, P. (1972)	Verbal Strategies	laboratory	bargaining	dependent	outcome
Bonoma, T. (1972)	Verbal Strategies	laboratory	bargaining	independent	outcome
Bonoma, T. & Tedeschi, J. (1974)	Verbal Strategies	laboratory	bargaining	independent	outcome
Bonoma, T, Tedeschi, J. & Helm, B. (1974)	Verbal Strategies	laboratory	bargaining	independent and dependent	outcome
Cheney, Harford, Solomon (1972)	Verbal Strategies	laboratory	bargaining	independent	

Researchers	Communication Focus	Research Setting	Classification of Organizational Conflict	Variable	Data Collection Method
Krauss, R. & Deutsch (1966)	Verbal Strategies	laboratory	bargaining	independent	outcome
Summers, D. (1968)	Verbal Strategies	laboratory	bargaining	intervening	self-report and outcome
Tjosvold (1973)	Verbal Strategies	laboratory	bargaining	independent	self-report and outcome

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